

#### **State of Louisiana**

## **Coastal Protection and Restoration Authority of Louisiana (CPRA)**

# 2012/2013 Annual Inspection Report

for

# GIWW BANK STABILIZATION PROJECT (PERRY RIDGE TO TEXAS (CS-30)

State Project Number CS-30 Priority Project List 9

June 13, 2013 Calcasieu Parish



#### Prepared by:

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#### I. Introduction

The GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) is located in the Calcasieu-Sabine Basin on the northern bank of the Gulf Intracoastal Waterway in Calcasieu Parish. The 1,132 acre project area extends from the Perry Ridge on the northern shore of the GIWW westward to the Sabine River. (See Appendix A).

The GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) was authorized by Section 303(a) of Title III Public Law 101-646, the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) enacted on November 29, 1990 as amended and approved on the ninth Priority Project List. The GIWW Bank Stabilization (Perry Ridge to Texas) Project has a twenty –year (20 year) project life, which began in July 2002.

#### II. Project Description and History

The GIWW Bank Stabilization (Perry Ridge to Texas) Project encompasses 1,132 acres and is bounded on the south by the Gulf Intracoastal Waterway (GIWW), on the east by Perry Ridge, on the west by Conway Bayou and the Sabine River, and on the north by a pipeline canal (Attachment II). The project involves the installation and maintenance of approximately 22,952 linear feet of terrace vegetated with California bulrush plants located in shallow water areas north of the GIWW and 10,705 linear feet of foreshore rock dike on the northern bank of the GIWW from Perry Ridge heading westward to the Sabine River and then along the eastern bank of the Sabine River beginning at its intersection with the GIWW and heading north.

The Project has twenty-year (20 year) economic life, which began in July 2002.

The principal project features include:

- Site 1 Foreshore Rock Dike (approximately 10,705 linear feet)
- Site 2 Earthen Terraces with vegetative plantings

#### III. Inspection Purpose and Procedures

The purpose of the annual inspection of the GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) is to evaluate the constructed project features and identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, CPRA shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan, 2002). The annual inspection report also contains a summary of maintenance projects which were completed since completion of constructed project features and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A

summary of past operation and maintenance projects completed since completion of the GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) are outlined in Section IV.

An annual O & M inspection of the GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) was held on June 13, 2013 at approximately 11:40am under sunny skies and warm temperatures. In attendance were Mel Guidry, Stan Aucoin, and Darrell Pontiff of CPRA, along with Frank Chapman and Brandon Samson of NRCS, and Josh Carson for other inspections. The inspection began on the eastern end of the project.

The field inspection included a complete visual inspection on the rock dike. The terraces were not inspected during this site visit. Staff gauge readings and existing benchmarks were not available to be used to determine approximate water elevation and existing elevation of the foreshore rock dike and earthen terraces. Photographs were taken at each project feature (see Appendix B) and field inspection notes were compiled to record measurement and deficiencies (Appendix D).

#### IV. Summary of Past Operation and Maintenance Projects

<u>General Maintenance:</u> Below is a summary of completed maintenance projects and operation tasks performed since July 2002, the construction completion date of the GIWW Bank Stabilization Project Perry Ridge to Texas (CS-30).

No maintenance has been required on this project.

**Structure Operations:** There are no active operations associated with this project.

#### V. Inspection Results

#### Site 1—Foreshore rock dike

The dike is in very good condition. (Appendix B, Photo 1) As noted on prior inspections, there is one section of the dike where rock has been displaced by a barge. The condition has not changed and will continue to be monitored. (Appendix B, Photo 2) A second location was noted where it appears rock has been moved creating a 7 foot gap in the rock dike (Lat/Long N30° 03' 34", W93° 41' 16"). A breach has formed in the 320' earthen plug located behind the foreshore rock dike. Water is channeling through the breach in the earthen plug into the marsh creating a fairly substantial current behind the dike. (Appendix B, Photo 3-4).

#### Site 2—Earthen Terraces with vegetative plantings

The earthen terraces and vegetative plantings were not inspected during this trip. In concurrence with the federal sponsor it was decided the terrace field is in stable condition after several years post construction. Due to logistics/coordination involved with setting up the inspection as well as the stability of the terraces thus far, it was decided that an inspection

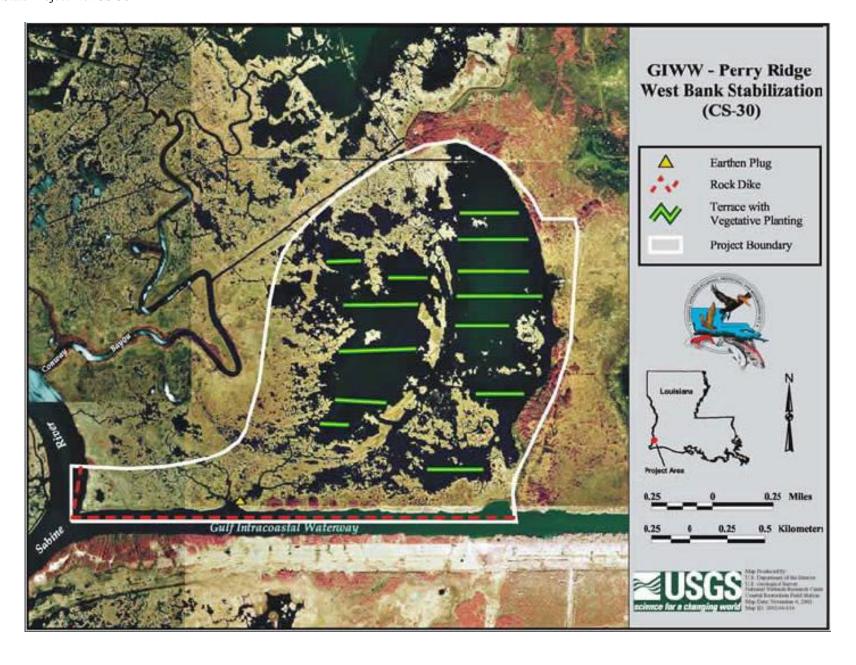
was not required every year. The earthen terraces will be inspected in 2013-2014 cycle of annual inspections.

#### VI. Conclusions and Recommendations

Overall, the Perry Ridge West Bank Stabilization Project is in very good condition and functioning as designed. A maintenance event to address the breach in the earthen plug has been initiated by CPRA. Lonnie Harper & Associates Inc. has completed the surveying and engineering services necessary to prepare a final design report for the proposed repair of the breach. Incremental funding to address the breach will be requested at the October 10, 2013 CWPPRA Task Force Meeting.

# Appendix A

**Project Features Map** 



Appendix B

**Photographs** 



Photo No. 1, Typical Rock Dike



Photo No. 2, Low Area of Displaced Rock Dike



Photo No. 3, Gap in Earthen Plug behind Rock Dike, Water Flow Channeling into Marsh



Photo No. 4, Water Flow through Displaced Rock Dike, Water Flow Channeling into Marsh

> Appendix C Three Year Budget Projection

# GIWW-PERRY RIDGE BANK STABILIZATION/ CS-30 /PPL 9 Three-Year Operations & Maintenance Budgets 07/01/2013 - 06/30/2016

2013/2014 (-12)   2014/2015 (-13)   2015/2016 (-14)	Project Manager	O & M Manager	Federal Sponsor	Prepared By	
Section   Sect	Pat Landry	Mel Guidry	NRCS	Mel Guidry	
State Administration		2013/2014 (-12)	2014/2015 (-13)	2015/2016 (-14)	
State Administration	Maintenance Inspection	\$ 6,457.00	\$ 6,651.00	\$ 6,851.00	
S	Structure Operation				
Sub Total - Maint. And Rehab.   S	State Administration		-	-	
13/14 Description:	Federal Administration		-	\$ -	
Construction   Construction   Sub Total - Maint. And Rehab.   S	Maintenance/Rehabilitation				
Construction Oversight Sub Total - Maint. And Rehab. \$ -    E&D	13/14 Description:				
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E&D		Sub Total - Maint. And Rehab.	\$ -		
E&D	15/16 Description:				
Construction Oversight  Sub Total - Maint. And Rehab.  2013/2014 (-12) 2014/2015 (-13) 2015/2016 (-14)  Total O&M Budgets \$ 6,457.00 \$ 6,651.00 \$ 6,851.00  O &M Budget (3 yr Total) \$ 19,959.00					
Construction Oversight  Sub Total - Maint. And Rehab.  2013/2014 (-12) 2014/2015 (-13) 2015/2016 (-14)  Total O&M Budgets \$ 6,457.00 \$ 6,651.00 \$ 6,851.00  O &M Budget (3 yr Total) \$ 19,959.00	<b>ـ</b> ه			¢	
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2013/2014 (-12)   2014/2015 (-13)   2015/2016 (-14)     Total O&M Budgets   \$ 6,457.00   \$ 6,651.00   \$ 6,851.00     O &M Budget (3 yr Total)   \$ 19,959.00				*	
2013/2014 (-12)   2014/2015 (-13)   2015/2016 (-14)     Total O&M Budgets   \$ 6,457.00   \$ 6,651.00   \$ 6,851.00     O &M Budget (3 yr Total)   \$ 19,959.00	Construction Oversight		Sub Total Maint And Dela	•	
Total O&M Budgets         \$ 6,457.00         \$ 6,651.00         \$ 6,851.00           O &M Budget (3 yr Total)         \$ 19,959.00			зию тотаг- maint. And Kehab.	Ψ -	
Total O&M Budgets         \$ 6,457.00         \$ 6,651.00         \$ 6,851.00           O &M Budget (3 yr Total)         \$ 19,959.00		2013/2014 (-12)	2014/2015 (-13)	2015/2016 (-14)	
	Total O&M Budgets		\$ 6,651.00		
Inexpended O & M Rudget \$ 12 374 00			·		
<del></del>	Unexpended O & M Bud	_		\$ 18,374.00 \$ (1.585.00)	
Remaining O & M Budget (Projected) \$ (1,585.00)  Note: Incremental funding will be requested at the Sept. TC Mtg.					

# Appendix D

**Field Inspection Form** 

#### MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: CS-30 GIWW-Perry Ridge West Bank Stabilization Date of Inspection: June 13, 2013 Time: 11:40 am

Structure No. Inspector(s): Mel Guidry, Stan Aucoin, and Darrell Pontiff (CPRA)

Frank Chapman, Brandon Samson (NRCS), Josh Carson (COE)

Structure Description: Rock Dike/Earthen Terraces Water Level: Not Available

Type of Inspection: Annual Weather Conditions: Sunny and warm

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
	N/A				
Steel Bulkhead					
/ Caps					
Steel Grating	N/A				
Stop Logs	N/A				
Hardware	N/A				
Timber Piles	N/A				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
Cables	N/A				
Signage	N/A				
/Supports					
Rip Rap (fill)	Good				Dike in good condition. Low area where it appears a barge has displaced the rock.
(foreshore dike)				3-4	Seven foot gap in rock dike. Cut in Earthen Plug behind dike.
					Survey of location complete at this location. N 30° 03' 34.0" W 93° 41' 16.2"
Earthen Terraces	N/A				Not inspected on this trip.
Vegetative Plantings					

What are the conditions of the existing levees?
Are there any noticeable breaches?
Settlement of rock plugs and rock weirs?
Position of stoplogs at the time of the inspection?
Are there any signs of vandalism?